



SECTION 1071

ASPHALT RELEASE AGENTS AND FIBER ADDITIVES

1071.1 Scope. This specification covers asphalt release agents for use in coating truck beds and bituminous mixture admixtures.

1071.2 Asphalt Release Agent. The asphalt release agent shall not be detrimental to bituminous mixtures and shall not dissolve asphalt when applied to the truck bed.

1071.2.1 Physical Properties. The following physical properties shall be determined.

1071.2.1.1 The weight per gallon (mass per liter) shall be determined in accordance with AASHTO T 59, "Weight per Gallon of Emulsified Asphalt".

1071.2.1.2 The percent solids shall be determined in accordance with the requirements of ASTM D 1644, Method A.

1071.2.1.3 The pH of the undiluted agent shall be determined by appropriate methods.

1071.2.1.4 When tested in accordance with MoDOT Test Method T63, the asphalt release agent shall show no evidence of dissolving the asphalt.

1071.2.2 Dilution by diesel or other petroleum products will not be allowed.

1071.2.3 Manufacturer and Brand Name Approval. Prior to approval and use of an asphalt release agent, the manufacturer shall submit to the Division Engineer, Materials, a certified test report showing typical ranges for weight per gallon (mass per liter), percent solids, pH and the results of tests performed in accordance with MoDOT Test Method T63. The certified test report shall show the manufacturer's name, brand name of material, lot and date tested. The manufacturer shall also submit a one quart (liter) sample accompanied by a material safety data sheet for the material. In addition, the manufacturer shall furnish information for any dilution requirements including the minimum dilution rate and special application requirements. Upon approval of the material, the brand name, manufacturer, type of release agent, dilution rate and any special application requirements will be placed on a list of prequalified asphalt release agents.

1071.3 Bituminous Mixture Fiber Additives. Fibers for stone mastic asphalt mixture may be either cellulose or mineral fiber and shall comply with the requirements specified herein when tested in accordance with MoDOT Test Method T60.

1071.3.1 Cellulose Fibers.

1071.3.1.1 Physical Properties

Fiber Length, in. (mm), max.	0.25 (6.0)
Ash Content, percent	13.0 - 23.0
PH	6.5 - 8.5
Oil Absorption, times fiber weight (mass)	4.0 - 6.0
Moisture Content, percent by weight (mass), max.	5.0

1071.3.1.2 Sieve Analysis. The sieve analysis shall meet one of the following.

1071.3.1.2.1 Alpine Sieve Analysis.

Sieve Size	Percent Passing by Weight (Mass)
No. 100 (150 μ m)	60.0 - 80.0

1071.3.1.2.2 Mesh Screen Analysis.

Sieve Size	Percent Passing by Weight (Mass)
No. 20 (850 μ m)	75.0 - 95.0
No. 40 (425 μ m)	55.0 - 75.0
No. 140 (106 μ m)	20.0 - 40.0

1071.3.2 Mineral Fibers.

1071.3.2.1 Physical Properties.

Fiber Length, in. (mm), maximum mean test value	0.25
Fiber Thickness, in. (mm), maximum mean test value	0.0002

Shot Content:

Sieve Size	Percent Passing by Weight (Mass), min.
No. 60 (250 μ m)	95
No. 230 (63 μ m)	65
Moisture Content, percent by weight (mass), max.	5.0

1071.3.3 Prequalification and Brand Name Approval. Prior to any use of the fibers, the manufacturer shall furnish to the Division Engineer, Materials, a sample of the fiber for prequalification and brand name approval. The sample shall be accompanied by a certified test report showing specific test results of all properties for tests performed on the same lot or batch of material from which the sample was taken. Upon prequalification and brand name approval, the fiber will be placed on a list of prequalified fibers for use in stone mastic asphalt mixtures.

1071.3.4 Approval and Acceptance. Approval of cellulose or mineral fibers will be based on a manufacturer's certification that the material being furnished is the same as that furnished for prequalification and brand name approval, and that the material complies in all respects with the requirements of these specifications. In addition, the engineer reserves the right to sample and test any material at destination as deemed necessary.